

**AMENDMENTS TO THE SPECIFICATION**

Please replace paragraph [0022] with the following amended paragraph:

[0022] Instructions for each application is loaded in one instruction register, and for a system that supports two simultaneous applications two instruction registers 302, 304 are used. The two instruction registers 302, 304 are identical. The instruction register 304 has a stream ID indicator 308 to indicate the application is in stream mode, i.e., in a computational loop. The stream ID indicator 308 is set by hardware or the operating system. The instruction register 304 also has a valid bit 310 ~~308~~ that is normally set to indicate that instruction in the instruction buffer is valid. The valid bit 310 ~~308~~ is unset by hardware if there is a branch condition or a cache miss.